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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of

Rulemaking to Amend Parts 1, 2, 21, and 25  
of the Commission's Rules to Redesignate  
the 27.5-29.5 GHz Frequency Band, to  
Reallocate the 29.5-30.0 GHz Frequency Band,  
to Establish Rules and Policies for Local  
Multipoint Distribution Service and for  
Fixed Satellite Services

CC Docket No.  
92-297

**STATEMENT SUPPORTING REQUEST  
FOR EXTENSION OF TIME**

Sunnyvale GDI, Inc., Verdi, Nevada, on behalf of itself and the City of Long Beach, California, supports the request for a thirty-day extension of the comment period filed by Sierra Digital Communications, Inc.

The withdrawal of the 31 gcs. band for traffic microwave devices would affect a far larger number of governmental entities than the Fourth Notice appears to contemplate. A partial list of affected governmental entities is appended hereto. Getting the word to and acted on by the affected entities all around the country is extremely difficult in the short period between Federal Register publication and the August 12th comment deadline.

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These frequencies are used for traffic video cameras and for traffic signal controllers. Air quality in the United States would be adversely affected by the increased auto idling time that would result from the proposed withdrawal of these frequencies. An article describing the technology prepared by Mark Biswell, Traffic Systems Analyst, City of Topeka, is appended.

In our view, the Commission is required by National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-35, to evaluate the environmental impact on air pollution of its proposal before acting. Thus, ultimately, no delay in disposition of this proceeding would be produced by granting the extension, since the Commission has yet to prepare the draft and final EIPSS required by Part 1(I) of its Rules and Section 1.1314 in particular.

Respectfully submitted,



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Their Attorney

August 9, 1996

Certificate of Service

I hereby certify that I have caused to be mailed this day a copy of the foregoing statement to:

Mitchell Lazarus, Esq.  
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\_\_\_\_\_  
William Malone

Washington, D.C.  
August 9, 1996



HAWAII (22)  
HAWAII (6)  
SPARKS-RENO (16)  
COBB COUNTY (8)  
ARLINGTON (12)  
SAN DIEGO (10)  
SAN DIEGO (8)  
LOS ANGELES (2)  
COLTON (10)  
VISALIA (6)  
WASHINGTON, STATE OF (?)  
IDAHO FALLS (8)  
NORTH CAROLINA (4)  
ST. LOUIS (?)  
MONTCLAIR (3)  
LAS VEGAS (2)  
HARTFORD (4)

**CONSULTANTS:** That are writing this technology into specifications

Barton Aschman

Kimberly- Horn

JHK

Meyer-Mohaddas

8 to 10 smaller ones

Sincerely,

Frank Ribelin  
President

AUG- 6-96 TUE 11:41

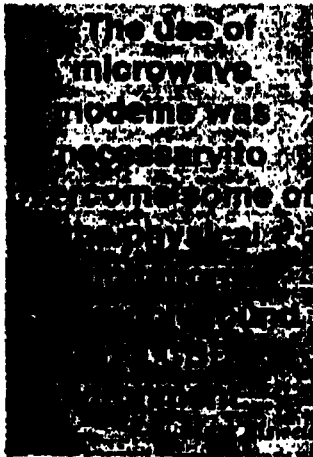
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## MOVITE AREA NEWS

### *Microwave Traffic Signal Communications*

*by Mark Biswell, City of Topeka, Kansas*



The City of Topeka has recently completed phase three of a four year plan to equip the City's Central Business District with communications for a closed loop system. The communication mediums being used to accomplish the project is a combination of telephone drops, twisted pair cable and wireless communications in the form of microwave modems. The use of microwave modems was necessary to overcome some of the physical limitations commonly found in a CBD environment that prohibits the installation of underground cables. Microwave modems were selected at implementation time as the substitute for phone drops and/or twisted pair due to full-duplex operation, direct integration into the existing communication system without the need to modify traffic controller software, no FCC requirements for allocating a frequency, high reliability (manufacturer rated at 100,000 hours MTBF), low risk for frequency crowding (which is anticipated in the 902-928 MHz Spread Spectrum Radio Bands) and ease of installation.

The microwave modems selected for the project are distributed by Sunayvale General Devices and Instruments. The 3120 Series Digital Microwave Radio consists of a full duplex radio system operating over the frequency band of 31.0 to 31.3 GHz. The system is capable of processing audio tones within the normal telephone company bandwidth for a two/four wire leased line and can handle a standard two-wire or four-wire telephone. This capability is ideal for direct replacement of twisted pair in environments not conducive to underground or overhead installations. The microwave system consists of an integrated mast mounted antenna or antennas that house the microwave transmitter and receiver assemblies and control and signal processing units. The second component of the system consists of an interface unit that provides the connection between the antennas and the traffic controller. The interface unit is capable of interfacing four antenna assemblies. One interface unit in the system is designated as a master with the downstream installations designated as locals. This designation is configured through jumpers internal to the interface unit. Connection between the interface unit and the antennas is provided through a three-pair 18 gauge cable. The cable provides a foil shield and stranded drain for individual pairs that provide two audio and one power connection to the antenna. Installation of the system at an intersection is basic consisting of mounting and wiring the components and aligning the antennas. Line of sight alignment is a simple process that utilizes a VOM as a signal strength meter at the antenna. Antennas are installed in pairs according to frequencies to provide isolation from adjacent antennas. There are 6 frequency pairs between 31.0125 and 31.2475 GHz and each antenna is designated in A or B configurations (i.e. 6A to 6B). Range for the system is specified by the manufacturer at a maximum distance of 1.5 miles but the units have an operating range of about 4.5 miles in optimal line-of-sight conditions.

FCC requirements for the installation of the microwave units consist of applying for a site license. The process basically notifies the FCC of the type of unit, location in terms of latitude-longitude and operating height (requiring the location to be surveyed if the lat-long is not known) and relation to airports. A blanket site license can be obtained for a pre-determined radius (i.e. city limits) that will allow installations to be made without further application to the FCC.

City signal crews installed 6 units in 1994, 14 units in 1995 and 22 units in 1996 and have experienced excellent performance and reliability with no down-time after initial installation. The microwave modems have also been used for temporary communications during construction projects due to ease of installation. This capability has recently played an invaluable role in preserving communications for a traffic responsive system that was threatened by a road project. A twisted pair communication link was destroyed during construction of a right turn lane but was quickly restored within a few hours by a microwave link.

